

WHAT IS CLAIMED IS:

1. An air conditioning system including multiple thermostats disposed at predetermined locations throughout a building defining enclosed spaces and for controlling an air conditioning unit, said multiple thermostats each including a temperature display and switch actuators for setting a temperature setpoint, said multiple thermostats including control circuits, respectively, operably in communication with each other such that changing a temperature setpoint at any one of said multiple thermostats will change the temperature setpoint of all of said thermostats.

2. The system set forth in Claim 1 wherein:  
said multiple thermostats each include a radio frequency transmitter and receiver and said multiple thermostats communicate with each other via radio frequency signal transmission.

3. The system set forth in Claim 1 wherein:  
at least selected ones of said multiple thermostats include a Control Here switch actuator operable to effect control of said air conditioning unit to control the temperature in accordance with the temperature setpoint at the thermostat at which the Control Here switch actuator has been most recently actuated.

4. The system set forth in Claim 3 wherein:

at least one of said multiple thermostats is configured to receive signals indicating the temperature sensed at selected ones of others of said multiple thermostats and said  
5 at least one thermostat includes control circuitry operable to determine an average temperature sensed by said others of said thermostats and said system is controlled to satisfy the demand for one of heating and cooling said spaces based on said average sensed temperature as a setpoint.

5. The system set forth in Claim 3 wherein:

at least selected ones of said multiple thermostats include a clock and a visual display of time recorded by said clock, said selected ones of said thermostats include switch  
5 actuators for setting a time displayed and means operable upon changing the time displayed by one of said thermostats to effect a change in the time displayed by each of said selected ones of said thermostats having said time display.

6. The system set forth in Claim 3 wherein:

said multiple thermostats are configured to display a temperature setpoint set by any one of others of said multiple thermostats upon changing the setpoint of one of said multiple  
5 thermostats.

7. The system set forth in Claim 1 wherein:

at least a selected one of said multiple thermostats include a time display, a Daylight Saving Time icon, and a Daylight Saving Time switch actuator for changing at least one  
5 of a time setting function of said at least one thermostat and said time display in accordance with selection of Daylight Saving Time or Standard Time by actuation of said Daylight Saving Time switch actuator.

8. The system set forth in Claim 1 wherein:

at least one of said multiple thermostats is configured to receive signals indicating the temperature sensed at selected ones of others of said multiple thermostats and said  
5 at least one thermostat includes control circuitry operable to determine an average temperature sensed by said others of said thermostats and said system is controlled to satisfy the demand for one of heating and cooling said spaces based on said average sensed temperature as a setpoint.

9. The system set forth in Claim 1 wherein:

at least selected ones of said multiple thermostats include a clock and a visual display of time recorded by said clock, said selected ones of said thermostats include switch  
5 actuators for setting a time displayed and means operable upon changing the time displayed by one of said thermostats to effect a change in the time displayed by each of said selected ones of said thermostats having said time display.

10. The system set forth in Claim 1 wherein:

said multiple thermostats are configured to display a temperature setpoint set by any one of others of said multiple thermostats upon changing the setpoint of one of said multiple  
5 thermostats.

11. A method for controlling operation of an air conditioning system for providing conditioned air to enclosed spaces, said system including multiple thermostats disposed in selected ones of said enclosed spaces and operably connected  
5 to said system for controlling the temperature in said enclosed spaces, respectively, said multiple thermostats each including a temperature sensor and a display for displaying the temperature sensed, a setpoint temperature and the time of day, and said multiple thermostats being operably connected to  
10 each other by one of electrical conductors and radio frequency signal transmission, said method including the steps of:

sensing temperatures in said enclosed spaces by respective ones of said multiple thermostats and communicating the sensed temperatures between selected ones of said multiple  
15 thermostats.

12. The method set forth in Claim 11 including the steps of:

providing at least one of said thermostats with a microcontroller, conducting signals corresponding to said  
5 sensed temperatures to said at least one thermostat, determining an average sensed temperatures by said microcontroller and causing said system to satisfy said average temperature as a setpoint temperature for said multiple thermostats.

13. The method set forth in Claim 12 wherein:

at least selected ones of said thermostats include switch actuators for setting a setpoint temperature to be displayed by said thermostats, respectively, whereby setting a setpoint  
5 temperature by any one of said thermostats causes said setpoint temperature to be displayable on at least selected others of said thermostats.

14. The method set forth in Claim 12 wherein:

at least selected ones of said thermostats include a Control Here switch actuator and said method includes actuating a Control Here switch actuator of one of said  
5 thermostats to cause said system to satisfy a temperature setpoint of said one thermostat.

15. The method set forth in Claim 12 wherein:

at least selected ones of said thermostats include a clock, a time display and at least one clock setting switch actuator and said method includes the steps of setting the  
5 time at one of said thermostats and displaying the same time setting at others of said thermostats.

16. The method set forth in Claim 11 including the steps of:

providing selected ones of said thermostats with a Daylight Saving Time switch actuator operable to advance an  
5 initial clock setting one hour and display a Daylight Saving Time icon, and correcting a discrepancy between a time shown on a display and the display or lack thereof of said icon by:

actuating one of said Daylight Saving Time switch actuators a first time to advance the time displayed one hour  
10 from the initial time setting and to display said icon;

actuating said Daylight Saving Time switch actuator a second time to set back the time displayed one hour from said initial time setting and extinguish said icon; and

actuating said Daylight Saving Time switch actuator a  
15 third time to set the correct time and display said icon.

17. The method set forth in Claim 16 wherein:

the step of actuating said Daylight Saving Time switch actuator a third time is delayed a predetermined amount of time after actuation of said Daylight Saving Time switch  
5 actuator a second time.

18. The method set forth in Claim 11 including the steps of:

providing selected ones of said thermostats with a Daylight Saving Time switch actuator operable to set back an  
5 initial clock setting one hour and extinguish a Daylight Saving Time icon, and correcting a discrepancy between a time shown on a display and the display or lack thereof of said icon by:

10 actuating one of said Daylight Saving Time switch actuators a first time to set back the time displayed one hour from an initial time setting and to extinguish said icon;

actuating said Daylight Saving Time switch actuator a second time to advance the time displayed one hour from said initial time setting and display said icon; and

15 actuating said Daylight Saving Time switch actuator a third time to set the correct time and extinguish said icon.

19. The method set forth in Claim 18 wherein:

actuation of said Daylight Saving Time switch actuator said third time is delayed a predetermined time from actuation of said Daylight Saving Time switch actuator said second time.

20. The method set forth in Claim 11 wherein:

at least selected ones of said thermostats include switch actuators for setting a setpoint temperature to be displayed by said thermostats, respectively, whereby setting a setpoint  
5 temperature by any one of said thermostats causes said setpoint temperature to be displayable on at least selected others of said thermostats.

21. The method set forth in Claim 11 wherein:

at least selected ones of said thermostats include a Control Here switch actuator and said method includes actuating a Control Here switch actuator of one of said  
5 thermostats to cause said system to satisfy a temperature setpoint of said one thermostat.

22. The method set forth in Claim 11 wherein:

at least selected ones of said thermostats include a clock, a time display and at least one clock setting switch actuator and said method includes the steps of setting the  
5 time at one of said thermostats and displaying the same time setting at others of said thermostats.



23. A method for obtaining the correct setting of time and display of an icon on a display for a clock associated with a thermostat for an air conditioning system, said clock display being driven by a control circuit and a switch actuator for changing the clock setting and the display of said icon to identify whether the clock setting displayed is Standard Time or Daylight Saving Time, said clock setting being established after elapse of a predetermined time after a change of clock setting initiated by said switch actuator, said method comprising the steps of:

causing a first actuation of said switch actuator to one of advance said clock hour and set back said clock one hour with respect to an initial clock setting and change the status of said icon;

causing a second actuation of said switch actuator to change the clock setting in the opposite direction with respect to said initial clock setting from the first actuation and change the icon status to that opposite of that shown in response to said first actuation;

waiting a predetermined time to allow the clock setting to establish at the setting caused by one of said actuations; and

causing a third actuation of said switch actuator to change the clock setting to the correct setting of time and icon status.

24. The method set forth in Claim 23 wherein:

said first actuation of said switch actuator advances the clock setting one hour from said initial setting and displays said icon and said second actuation of said switch actuator  
5 sets the clock back one hour from said initial setting and extinguishes said icon and a sequence of three presses of said switch actuator results in the correct setting of Daylight Saving Time and display of said icon.

25. The method set forth in Claim 23 wherein:

said first actuation of said switch actuator sets back the clock setting one hour from said initial setting and extinguishes said icon and said second actuation of said  
5 switch actuator advances the clock setting one hour from said initial setting and displays said icon, and a sequence of three actuations of said switch actuator results in the correct setting of Standard Time and extinguishment of said icon.

26. An air conditioning system including multiple thermostats disposed at predetermined locations throughout a building defining enclosed spaces and for controlling an air conditioning unit, said multiple thermostats each including a  
5 temperature display and switch actuators for setting a temperature setpoint, said multiple thermostats including control circuits, respectively, operably in communication with each other.

at least one of said multiple thermostats includes a time  
10 display, a Daylight Saving Time icon, and a Daylight Saving Time switch actuator for changing at least one of a time setting function and a time display of all of said thermostats in accordance with selection of Daylight Saving Time or Standard Time by actuation of said Daylight Saving Time switch  
15 actuator.

27. The system set forth in Claim 26 wherein:

said multiple thermostats each include a radio frequency transmitter and receiver and said multiple thermostats communicate with each other via radio frequency signal  
5 transmission.

28. The system set forth in Claim 26 wherein:

at least selected ones of said multiple thermostats include a Control Here switch actuator operable to effect control of said air conditioning unit to control the  
5 temperature in accordance with the temperature setpoint at the thermostat at which the Control Here switch actuator has been most recently actuated.